



UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

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Wash

GENERAL GOVERNMENT
DIVISION

APR 17 1979



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Mr. Elijah B. Rogers
City Administrator
Washington, D.C. 20004

Dear Mr. Rogers:

The General Accounting Office studied the District's initial efforts to establish a municipal bond program, the related planning for and administration of capital improvements scheduled for bond financing, the criteria for including items in the capital budget, and the estimated outstanding debt and debt service expense for fiscal years 1979 through 1985. We have considered District officials' comments in this report.

Although the District's bond program has been delayed pending improvements in the City's financial management system, we believe our recommendations on the planning and administration of capital improvements (pp. 8, 18 and 24) should be implemented as soon as possible and our recommendations on the bond program (pp. 25 and 28) should be implemented before it is reinstituted in 1981.

The District had \$1.23 billion of outstanding debt at the end of fiscal year 1977 and it estimates borrowings to increase to about \$2.55 billion at the end of fiscal year 1985. The expected financial commitment through 1985 will bring the City closer to its legal debt ceiling (about 2.6 percent from the limit). This condition requires a system that prevents unnecessary borrowings and costs and insures funding of projects that support high priority city-wide goals. The District needs to improve its capital project planning system by

- developing project plans that meet city-wide goals as well as individual agency goals,
- establishing priorities to aid in selecting projects for construction,

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Group III
letter report
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- insuring that project justifications are complete and based on reliable and accurate data, *and*
- revising guidelines for distinguishing between capital and operating items.

Also, the District needs to issue procedures that clearly delineate responsibilities for administering the bond program and establish guides to aid personnel in carrying out related day-to-day activities. ~~The District~~ *also* needs to make accurate estimates of water and sewer revenues to support the soundness of issuing revenue bonds. Details regarding these matters are included in Enclosure I.

Copies of this report are being sent to the Mayor of the District of Columbia; the Council of the District of Columbia; the Assistant City Administrator for Budget and Resource Development; the Assistant City Administrator for Financial Management; the Acting Inspector General of the District of Columbia; and the District of Columbia Auditor.

We would like to express our appreciation to the District's staff for the courtesies and cooperation extended during our study. Please let us know within 60 days the actions taken on the matters discussed. If you have any questions, please call me on 727-1873.

Sincerely yours,

Frank Medico
Frank Medico
Assistant Director

Enclosures

CNG 00052

ENCLOSURE I

ENCLOSURE I

OBSERVATIONS ON THE
DISTRICT OF COLUMBIA'S
MUNICIPAL BOND PROGRAM

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THE BOND PROGRAM AND RELATED CAPITAL
PROJECT PLANNING AND ADMINISTRATION
SHOULD BE IMPROVED

Summary of improvements needed

The District's capital project planning is conducted at each agency and is directed toward meeting agency goals not city-wide goals. Under the present system, there is no list of city-wide priorities so officials cannot rank capital projects in order of importance. Therefore there is no guarantee that the limited funds available are used to finance projects supporting high priority city-wide goals before lower priority projects.

Capital project justifications, scopes of work, and cost estimates have not been as complete and accurate as they should be. Project justifications and scopes of work must be complete and accurate to determine whether projects should be undertaken and to estimate their costs. Accurate cost estimates are needed to determine the amount of the bond authorization. Problems and added costs can result from overstated or understated bond authorizations.

The District's guidelines used to determine which items qualify for the capital budget may not be sufficient to exclude operating items from the capital budget. Using capital funds to pay operating items reduces the amount available for needed capital improvements.

The District, when establishing its bond program, did not issue any procedures to implement it. Sound program management practices require written procedures to delineate responsibilities, to inform and guide personnel, and insure all required actions are taken when needed.

The water and sewer revenue projections have not been as accurate as they should be. Accurate revenue projections will be needed to establish the soundness of revenue bonds issued to finance water and sewer projects.

District is approaching its
legal debt limit

The District's leading financial indicators have undergone noticeable changes in the last several years. This has been particularly evident for the city debt. From 1972 to 1977, outstanding loans borrowed from the U.S. Treasury

have more than doubled and debt service has more than tripled. The increases are even more significant on a per capita basis because estimates show the City's population declined by more than 30,000 residents from 1972 to 1976 (see table on p. 3). The Home Rule Act authorizes the District to borrow funds by issuing its own bonds.

According to the District's "1980-1985 Capital Improvements Program" report, debt will continue to expand as the District makes the transition from loan to bond financing. It shows accumulated borrowings by FY 1985 to be \$2.55 billion, an increase of \$1.32 billion over the \$1.23 billion of outstanding long-term loans listed in the "Annual Financial Report FY 1977". Also, debt service in FY 1985 will increase \$116 million over the FY 1977 total of \$80.8 million.

With these increases in debt service, the city is approaching its legal debt ceiling (the relationship between adjusted revenues and debt service expense). The following tables show these increases, relationships to population, and the estimated revenue and debt service limit.

Analysis of Debt and Population

<u>Year</u>	<u>Debt</u> -----in millions-----	<u>Debt Service</u> -----in millions-----	<u>Population</u>	<u>Debt Per Capita</u>
1972	a/\$ 546	\$ 24.6	753,000	\$ 725
1976	b/ 1,068	b/ 63.4	c/722,000	1,479
1977	b/ 1,229.8	b/ 80.8	"	1,703
1978	1,441	116.0	"	1,996
1979	1,568	112.0	"	2,172
1980	d/ 1,729	121.0	"	2,395
1981	d/ 1,932	129.0	"	2,676
1982	d/ 2,129	145.0	"	2,949
1983	d/ 2,308	163.0	"	3,197
1984	d/ 2,453	180.0	"	3,398
1985	d/ 2,547	197.0	"	3,528

a/1972 Financial and Statistical Report, Financial Report p. 3.

b/Annual Financial Report FY 1977

c/1975 population estimate in the "District of Columbia Data", December 1976. This estimate was also used for the years 1976 through 1985. A Municipal Planning Office official said the 1977 estimate could be used for the period 1977-85 because it was near the midpoint of population estimates for the District of Columbia.

d/Debt anticipated to complete projects proposed through the 1980-1985 Capital Improvements Program.

ENCLOSURE I

ENCLOSURE I

**DISTRICT OF COLUMBIA
REVENUE AND DEBT SERVICE ESTIMATES**

	FY 1979	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
-----in millions-----							
Revenue:							
District revenue	\$1,283.4	\$1,398.6	\$1,461.9	\$1,528.5	\$1,597.7	\$1,672.3	\$1,747.6
Less court fees	2.4	2.1	2.1	2.1	2.1	2.1	2.1
Less police & fire retirement contributions	<u>17.3</u>	<u>18.7</u>	<u>20.1</u>	<u>21.6</u>	<u>23.2</u>	<u>24.9</u>	<u>26.6</u>
Adjusted revenue	1,263.7	1,377.8	1,439.7	1,504.8	1,572.4	1,645.3	1,718.9
14% debt ceiling	176.9	192.9	201.6	210.7	220.1	230.3	240.7
Total debt service	\$ 111.7	\$ 120.5	\$ 129.0	\$ 144.5	\$ 162.9	\$ 180.4	\$ 196.5
Debt service to adjusted revenue	8.8%	8.7%	9.0%	9.6%	10.4%	11.0%	11.4%

Source: 1980-85 Capital Improvements Program report and FY 1980 Executive Budget.

Capital investment process

The three principal phases of the capital investment process are planning, administration, and financing. In order to determine which capital improvements are necessary, goals, priorities, and programs must be established to meet the City's needs. Programs should be developed and approved to achieve overall goals. Capital improvements should support programs and contribute to goal achievement. Financing capital improvements requires planning and ranking projects in their order of importance or need.

IMPROVEMENTS IN PLANNING
CAPITAL PROJECTS ARE NEEDED

The District has not established city-wide goals on a priority basis and has not set forth priorities to guide city agencies in their capital project planning. Consequently, capital project planning reflects agency goals and priorities which may not be reflective of high priority city-wide goals. Enclosure II shows for fiscal year 1980 the amount of capital improvements requested by agencies versus the amount recommended by the Capital Improvements Program-Technical Advisory Committee. 1/ Without formal goals and guidelines we have no way of assessing whether the projects selected for funding are the ones that have the highest priority and need.

As the District's financial pressures continue, the need to choose among competing capital projects to keep spending in line with resources will continue.

The District needs improved capital project planning and budget systems that insure the planning and funding of projects that support high priority city-wide goals. Defining priorities and communicating them to city agencies before the capital planning process begins would

--insure planning of projects that address high priority goals,

1/Capital Improvements Program-Technical Advisory Committee (CIP-TAC)--a committee comprised of members from various city agencies and the National Capital Planning Commission which reviews capital budget requests from agencies and makes recommendations for approval and funding.

- provide the information needed by City officials to make funding decisions, and
- insure funding of projects designed to support high priority city-wide goals.

The District also needs to improve capital project justifications, scopes of work, and cost estimates before a sound borrowing program can be established. Problems in these areas have existed at least since 1972. The House Appropriations Committee Report (dated May 31, 1972) on the District's fiscal year 1973 appropriations bill specifically mentioned inadequate project justifications, scopes of work, and cost estimates as problems.

The District's capital improvement guidelines appear to allow operating items in the capital budget. Funding operating items with long-term debt (1) is not a sound financial management practice and (2) decreases the amount of funds available to pay for capital projects. Because the City is approaching its debt ceiling, it should avoid spending borrowed money for operating items because it decreases the amount available for capital projects on a dollar-for-dollar basis. Money spent for operating items today will be money that will not be available for facilities needed in the future.

Priorities are not formally
communicated to agencies before
capital project plans are prepared

The 6-year Capital Improvements Program is the District's main vehicle for identifying and funding the development of and improvements to the city's capital facilities. The former Special Assistant to the Mayor for Budget and Management Systems annually sent a standard memorandum to the heads of agencies which transmitted the Capital Improvement Program instructions and guidelines. The annual memorandums have typically discussed fiscal considerations, changes to procedures, and the schedules for project submission and review. (See enc. III.) Agencies were briefed on such matters as planning and development activities in the city, financial planning information, long-range budget requirements, status of the current Capital Improvements Program, instructions for development of new program and the budget policy (e.g., impact of construction on operating budget) for the current year.

District agencies proposed capital projects and submitted them to the Office of Budget and Resource Development, formerly called the Office of Budget and Management Systems (OBMS). (See enc. IV.) CIP-TAC reviewed the projects and determined project feasibility and priority. CIP-TAC used its criteria (see enc. V.) to determine priorities for funding permanent improvements and made recommendations to OBMS for funding. OBMS made recommendations to the Mayor who decided whether the CIP-TAC and OBMS recommendations were consistent with his goals and priorities. OBMS then prepared the final budget and 6-year Capital Improvements Program. The budget (Mayor's Executive Budget) was submitted to the City Council for consideration.

A Municipal Finance Officers Association publication states that it is desirable for a city's chief executive to advise departments by memorandum of important policy considerations which he believes should help shape the capital program. With this mechanism, for example, the chief executive can respond to changing legislation and public opinion by shifting emphasis on certain types of facilities or accelerate schedules for others. The illustration used by the Association was an annual memo from a chief executive to a city department (memos were tailored for each department) which discussed capital trends and financing and suggested for the department specific areas for capital project emphasis to comply with legislation, city council requests, and the chief executive's own desires.

An OBMS official told us that the city's priorities are not all formalized in written statements but that the CIP-TAC members and OBMS personnel are generally aware of the city's priorities. He noted that the priority awareness usually comes from the Mayor's budget and policy statements, City Council and congressional reports on the budget, and through departmental staff meetings usually following Mayor's Cabinet meetings. The official also said that the Mayor and OBMS had sent letters and memos to some agencies, at times, that advised them of matters affecting priorities such as changing legislation.

OBMS could not provide us with a list or statement of the city's priorities. Although we requested copies of the memos sent by the Mayor to department heads, we were never provided or shown them because, according to an OBMS/CIP-TAC official, they could not be located. In addition, the OBMS/CIP-TAC official told us that he was not privy to the Mayor's Cabinet meetings or other contacts between the Mayor and department heads where priorities may have been discussed.

It seems to us that CIP-TAC and OBMS need such information along with their priority awareness to be able to properly determine the priority projects and recommend project funding.

Conclusion

The District does not have a list or statement of the city's priorities. OBMS officials could not demonstrate that District agencies systematically receive notice of city-wide priorities before they prepare project proposals for inclusion in the capital plan and budget. In a government as large as the District's such guidance could result in (1) a more efficient preparation of the capital plan and capital budget and (2) a plan and budget that are better tuned to city-wide priorities.

Recommendation

We recommend that the City Administrator highlight the city issues and communicate priorities to each agency before the annual planning cycle, so the agency head can specifically plan projects to meet these priorities as well as projects they consider necessary to support their programs. The responsible reviewing organizations should use these priorities in addition to the other criteria they use, to decide whether to recommend projects for approval and funding.

Complete and accurate project proposals needed

District agencies submit capital project proposals (justifications, scopes of work, and cost estimates) to OBMS for approval. A detailed project justification is necessary to evaluate whether a project should be undertaken. A complete project description is needed also to determine compliance with Home Rule Act capital project criteria (see p. 19) and to provide a basis for an accurate cost estimate.

We examined the documentation for two capital projects originally scheduled for bond financing to determine the adequacy of the project justifications, scopes of work, and accuracy of the cost estimates. These projects are the Renovation and Modernization of D.C. Children's Center and the D.C. General Hospital Renovations and Additions.

Renovation and Modernization of
D.C. Children's Center Project

This renovation project consisted of 25 improvements and repairs designed to correct deficiencies caused by age and heavy usage. The budget submitted to the City Council estimated the project cost to be \$3.3 million with funds to be provided from the sale of general obligation bonds. The final cost estimate for the project was \$5.1 million. The difference occurred because the budget request was made before the final cost estimate was completed. We found:

1. The project justification did not include four improvement/repair items totaling \$195,000 that were included in the budget request. The District official responsible for reviewing project justifications informed us that he did not receive a justification for the four items and that some of the questions on the project justification form were not completely answered.
2. The Department of General Services official responsible for managing the project said the scope of work was not in sufficient detail to accurately estimate costs. The official also said that in general, many of the scopes of work are insufficient and require additional information so costs can be estimated.
3. Estimates are not checked for completeness or accuracy. The cost estimate for one item in this project contained errors. We recomputed the cost estimate using the same methodology and cost factors (including contingencies and inflation) as the District's estimators.
 - a. The District's estimate for the toilet and shower renovation was \$150,000 excluding overhead costs of \$30,000. Our computation (excluding overhead) was about \$137,000 or \$13,000 (8.7 percent) less than the District's estimate. The difference resulted from rounding on the part of the District's estimator. The estimator said rounding was acceptable because his computation was an estimate. He also said the estimators do not check their work for mathematical errors and that mathematical errors usually balance out anyway.

The Department of General Services (DGS) in commenting to GAO on the budget estimate said,

"The budget submitted to the City Council for Renovation and Modernization of the Children's Center did not estimate the project cost to be \$3.3 million as stated in your report. The \$3.3 million represented a budget mark instead of the total cost of the project. As many of the twenty-five projects were to be accomplished as the \$3.3 million budget mark would allow."

The Mayor's 1977 Executive Budget to the City Council included the project and showed an estimated cost of \$3.3 million. The budget justification did not include a discussion of the information provided above by DGS. More importantly, the project was to be funded with general obligation bonds and, as discussed on pages 17 and 18, problems can arise when the budget estimate is substantially lower than the total project cost.

DGS's comments to GAO on insufficient scopes of work included:

"The scopes of work included on the capital budget schedule II must be sufficiently detailed to clearly indicate the major elements that are to be accomplished for a project. The major elements can often be broken down into hundreds of standard work items that must be performed to accomplish the project. That level of detail is not required in the budget scope of work, but must be taken into consideration when developing the cost estimates. Thus, in addition to the information provided by the scope of work, it is often necessary to study as-built documents and make on-site investigations before final budget estimates are prepared. This is standard procedure within the Department."

As previously stated, the DGS official responsible for this project told us that the DHR-prepared scope of work was insufficient. He said this occurs because, in general, the agencies do not know what needs to be done when they propose a project. This was also borne out by a memorandum regarding the scope of work for this project from the Deputy Director of DGS to the Chief of CIP-TAC. The memorandum stated in part that

"* * * There are some twenty-six different improvement projects listed under this project title. On the whole, the individual scopes of work are inadequate for budget estimating purposes. However, we have been working extensively with staff members of the Department of Human Resources and through a series of site surveys and conferences, have established an adequate scope of work for a number of these projects."

The scopes of work must be accurate so sound cost estimates can be prepared. As discussed on pages 17 and 18 the accuracy of cost estimates will be more critical when the District issues bonds to finance projects.

DGS's response to GAO on the accuracy of cost estimates was:

"Contrary to the report, estimates are checked for completeness and accuracy. Although a complete number by number, function by function check is not made on each project, each project is cross checked by standard methods used in the industry, e.g. past cost experience, average cost per square foot across the Nation and the adjustment of that cost to specific areas of the Nation. When the final estimate is found to be inconsistent with these cross checks, a detailed review and check of the estimate is made. Of course, there are occasional mistakes which are missed by the various checks. As far as rounding-off is concerned, it is standard practice in the estimating profession."

DGS's response to GAO acknowledged that the mathematical accuracy of cost estimates are not regularly checked. According to DGS, projects are cross-checked through standard methods used, such as, past cost experience, and average cost per square foot. These same factors are also used to prepare the cost estimates. We believe that accurate cost estimates are vital to avoid unnecessary borrowings when bonds are issued to finance projects (see pp. 17 and 18).

D.C. General Renovation
and Additions Project

The estimated cost and approved budget (including construction services and equipment) for this project was \$14,085,000.

1. We found the project justification did not discuss the \$92,800 surgical intensive care unit modification and the scope of work did not include a description of this item. Also, the cost estimate for construction was based essentially on a \$2.5 million estimate of the most recent construction at D.C. General which happened to be underestimated by about \$230,000.

DGS's comments to GAO in regard to the project justification and scope of work were:

"The D.C. General Renovations and Addition project was submitted as an amendment to the FY 1976 Capital Budget. The project was developed on an emergency basis subsequent to notification by the Department of Health Education and Welfare that major deficiencies had to be corrected by a specific deadline or the hospital would lose its funding certification. The budget request was developed under these conditions making full use of all available resources including an A/E consultant.

"The modifications to the surgical Intensive Care Unit were patient safety improvements and were a part of the work identified in the scope of work as safety improvements and in the project justification as improvement of working conditions for patients and employees."

The scope of work referred to by DGS included the categories "miscellaneous safety improvements" with no other explanation. The project justification stated "the miscellaneous renovations at DCGH will improve security and working conditions for patients and employees within the complex". As previously stated the project justification did not include a discussion of the surgical intensive care unit and the scope of work did not include a description of this item.

Cost estimates are
not accurate

We compared the first budget estimate with the final cost for 10 completed projects to determine the accuracy of the original budget estimates. The original estimates on 7 of the 10 projects were understated in amounts ranging from \$493,000 to \$2,852,500 representing understatements from about 16.4 to 121 percent of the original estimates. Five of the ten estimates were understated by at least 46 percent of the original estimates. The net understatement for all 10 estimates was \$6,967,500 or 35 percent.

The following table compares the original budget estimates with the final costs for the 10 projects.

Comparison of Cost Estimates with
Final Costs for 10 Completed Projects

	<u>Year first authorized</u>	<u>First budget estimate</u>	<u>Final Cost</u>	<u>Difference over (under)</u> <u>original estimate</u>	
				<u>Amount</u>	<u>Percent</u>
Shaw Branch Library	1970	\$ 772,000	\$1,677,000	\$ 905,000	117.2
Fifth District Station House	1970	2,998,000	3,491,000	493,000	16.4
Seventh District Station House	1972	875,800	879,800	4,000	.5
Engine Company No. 6 and Truck Company No. 4	1967	795,000	1,328,000	533,000	67.0
Bowen Elementary Addition	1970	1,273,400	1,859,400	586,000	46.0
Carver Elementary School Replacement	1968	1,342,000	2,201,000	859,000	64.0
Highland Elementary School	1970	8,144,000	8,927,500	783,500	9.6
Langdon Park (West) Playground	1968	192,500	209,500	17,000	8.8
Phelps Vocational School Addition	1970	1,107,000	1,041,500	(65,500)	(5.9)
Malcolm X Elementary School	1968	<u>2,357,000</u>	<u>5,209,500</u>	<u>2,852,500</u>	121.0
Total		\$ <u>19,856,700</u>	\$ <u>26,824,200</u>	\$ <u>6,967,500</u>	35.1

Although we did not review the details of the projects, we believe that the large understatements are the result of incomplete project planning, incomplete scopes of work, inaccurate cost estimates and/or construction delays. Regardless of the reasons, inaccurate budget estimates may lead to problems when bond financing is used as explained later.

DGS's comments to GAO on the accuracy of the cost estimates were:

"Any evaluation of the accuracy of cost projections during the period between 1967 and 1976 will probably reflect an excessively wide range between projection and actual cost. The primary reason is the instability of the economy during that period. * * * The major problem with the methodology (used by GAO to evaluate the accuracy of estimates) is the assumption that the original budget estimate was the anticipated final cost of the project and the further assumption that the District would use the same procedures to develop projects to be financed under the Municipal Bond Program. * * *"

DGS cited three projects, as examples, to support its point. One of the examples follows.

Shaw Branch Library, Project No. 11-17-70

FY 1970 - First year authorized, only site funds (\$50,000) were requested. The total estimated cost was \$772,000 to complete a building of approximately 20,000 square feet.

Site	\$ 50,000
Construction Services	46,000
Construction	575,000
Equipment	<u>101,000</u>
Final Budget Estimate	<u>\$772,000</u>

FY 1972 - The final budget cost estimate was developed and construction funds were requested from Congress. The final total estimated cost was \$1,751,000. The building square feet area was 27,608.

Site	\$ 141,000
Construction Services	135,000
Construction	1,335,000
Equipment	140,000
Final Budget Estimate	<u>\$1,751,000</u>

We believe that a budget estimate should reasonably forecast a project's cost. The example provided by DGS officials shows that the project was formally approved in 1970 at an estimated cost of \$772,000. The final budget cost estimate of \$1,751,000 (more than double the approved budget) was developed 2 years later in 1972 when construction funds were requested. The site costs alone nearly tripled from the approved budget. Also, the scope of the project expanded after the budget was approved. The District will not have an efficient bond program with cost estimates as inadequate as these.

An issue that remains for this and the other projects cited is--would these projects have been approved had the budget requests accurately forecast the costs and scopes?

DGS commented further

"However * * * the process in which major scope changes are allowed and the cost estimates revised to reflect those changes will not be used under the Municipal Bonding Program. Under the bonding program the planning and finalization of scope and cost will be concluded prior to the request for capital budget funding instead of during the multi-year period of incremental funding dictated by the congressional appropriations process."

DGS acknowledged that the original budget estimates did not represent the anticipated final cost of the project. Changes were made to projects (see pp. 15 and 16) which increased the costs and expanded the projects' scope. DGS said under the bond program scopes of work and cost estimates will be finalized before capital budget funding is requested. This will be essential for successful funding of capital projects.

Cost estimates affect
amount of bond financing

Accurate cost estimates are necessary to determine the amount of capital needed to finance projects. Overestimating the capital needed to finance projects may lead to issuing more bonds and incurring unnecessary debt and interest costs. On the other hand, underestimating may require additional financing thereby unnecessarily increasing the cost for the unfunded portion of capital projects.

In the past, the District reprogrammed funds borrowed from the U.S. Treasury from one project to another to adjust for differences between the amount approved and the actual cost.

According to the bond counsel's report, 1/ reprogramming between projects may no longer be possible because a project's funds will be limited to the bond issue proceeds. Bond proceeds may be used only for the project or projects cited in the authorization. When bond authorizations are based on inaccurate cost estimates, the following situations can arise:

1. Expected cost exceeds the amount of bonds authorized and issued. The District would have to obtain congressional budget approval to increase the amount of the project, then increase the bond authorization and issue.
2. Amount of bonds authorized and issued exceeds the cost of the project. The District would have to use the excess funds to retire the portion of the bond issue exceeding the project cost.
3. Bond authorization exceeds the estimated cost of the project. The District would not issue the full amount of the bonds authorized.
4. Project's cost is expected to exceed the bond authorization but no bonds have been issued.

1/Report of the law firm (specializing in the approval of the validity of municipal bonds) employed by the District to conduct a legal analysis of the Home Rule Act's borrowing provisions.

The bond counsel states that the District should amend the bond authorization act (subject to Congressional approval), to change the project's description and the amount authorized.

We believe that in the situation described in item 4, it is inadequate to simply amend the bond authorization act because a change in bond authorization is really a change in the capital budget and should be treated as such. The District plans to submit a request for a supplemental budget increase to the Congress when bonds issued are insufficient to cover a project's cost. We see no reason why this procedure should not be followed in all cases where bond authorizations need to be increased. Although the District will finance projects with money from bond issues, the Congress will continue to have budget approval authority. An OBMS official agreed that the need for any increase in a bond authorization should be requested through a budgetary submission to increase the amount for the capital project.

Conclusions

We believe that project justifications and scopes of work are not always as complete as they should be in order to justify projects and estimate costs. In addition, the bases and accuracy of some cost estimates are questionable. When bond financing is implemented by the District, these problems may result in issuing bonds in amounts significantly too large or too small to finance capital projects.

We also believe that it would be inadequate for the District to simply amend the bond authorization act in order to change a project's description and increase the amount authorized when bonds have yet to be issued. These changes are really changes in the capital budget.

Recommendations

The City Administrator should:

1. Insure that all project justifications and scopes of work provide enough information to evaluate the need for the projects and to estimate cost.
2. Establish procedures to insure that cost estimates are mathematically accurate and developed on a sound basis from reliable up-to-date information.

3. Require the submission of supplemental budget recommendations to the Congress for all projects that need bond authorization increases.

District's criteria may allow
operating items in the capital budget

Published criteria for selecting items that should be included in a public agency's capital budget for long term financing do not provide sufficient specificity to minimize judgments concerning the financing of items as capital or operating. It appears the District may be including some operating items in its capital budget.

We recognize that the District is faced with many difficult decisions in this regard, and that judgments must be made as to whether an item should be financed with long-term borrowings or with operating funds. Better criteria than exist could minimize the subjectivity that creeps into these judgments. Also, we believe the District's criteria must be refined to incorporate Home Rule Act requirements and should reflect the Municipal Finance Officers Association guidance to avoid some of the pitfalls experienced by other cities.

The following sections discuss some problems we have with the District's criteria for permanent improvements and equipment.

District officials told us the capital budget emphasis is shifting from new construction to modernization and rehabilitation of existing buildings (permanent improvements). As permanent improvements become a large part of the capital budget, it becomes increasingly important to have criteria that will minimize judgments which allow operating items to be paid with long-term debt.

The Home Rule Act defines a capital project as

- any physical betterment, or improvement and any related preliminary studies and surveys
- the acquisition of property of permanent nature
- the purchase of equipment for any public betterment or improvement when first erected or acquired.

Permanent improvements criteria

In defining "any physical public betterment or improvement", the bond counsel's report stated:

"Generally, speaking, it is clear that Congress had in mind items having a tangible physical existence which, under general legal and accounting principles, (emphasis added) would be regarded as capital items. Thus, a major street improvement involving reconstruction and resurfacing would undoubtedly qualify as a physical public betterment or improvement, whereas street repairs, including such items as the filling of potholes, would not. The cost of such items would be paid as a current expense."

The District's "Accounting Principles and Standards" contain the following criteria defining when betterments and improvements are capital items:

"Fixed assets owned by the District may be changed by additions, alterations, betterments, rehabilitations, or replacements. The principle in accounting for these changes is to capitalize the costs incurred where they significantly extend the useful life of property or its capacity to render service, (emphasis added) and to remove from the property accounts the cost of features superseded or destroyed in the process."

For accounting purposes, the National Committee on Governmental Accounting requires permanent improvements to increase efficiency or extend the useful life of an asset and the U.S. General Services Administration requires permanent improvements to provide a new use or extend the useful life of the asset. According to the National Committee on Governmental Accounting, upkeep of properties in a condition for use or occupancy is maintenance and is part of the operating budget.

A Municipal Finance Officers Association publication states that many expenditures for fixed assets, such as office furniture, equipment and passenger automobiles, do not appear to be appropriate to include in a capital program or capital budget because of their nature and recurring characteristics. On the other hand, expenditures for machinery are appropriate for inclusion in the capital budget if they are a part of the structures when first acquired or constructed (essentially the same requirement as the Home Rule Act, see p. 19).

OBMS established as part of the Capital Improvements Program for 1978-1983, the following criteria defining when betterments and improvements are capital items:

1. replacement or rehabilitation of major mechanical systems, or
2. alteration of a facility to make it more functional for new programmed use.

In either case, the criteria require that all items must increase the assessed or market value of the property and have an estimated useful life of at least 10 years.

An OBMS official responsible for the criteria told us that the Office uses a "total project concept" in which capital and operating items are combined to form a project. He said when such projects are taken as a whole they are capital projects.

A Municipal Finance Officers Association publication states that many fixed assets do not appear to be appropriate for inclusion in a capital budget. In addition, the National Committee on Governmental Accounting's accounting principles, U.S. General Services Administration's accounting principles and even the District's own accounting principles all require a betterment to extend the useful life of the property or increase its capacity to render service.

However, under the District's Capital Improvement Program criteria, replacements or rehabilitations of major mechanical systems with a useful life of 10 years are eligible for the capital budget even if they do not increase the useful life of the property or increase its capacity to render service etc. Useful life should be considered together with other criteria in determining whether the item qualifies for bond financing.

The District's Capital Improvements Program criteria for permanent improvements does not address a fundamental principle accepted in the accounting and financial management professions--not financing projects over a longer period than their useful life. This principle is, however, recognized in the District's criteria for equipment which state:

"In keeping with the requirements of the self-determination law and sound financial management, the term of borrowing from U.S. Treasury or the bond market will be set to approximately the life

of the equipment purchase. In no case will money be borrowed for a longer period than the expected life of the equipment."

In summary, one item common in the published criteria is that permanent improvements must increase the useful life of the property. A Municipal Finance Officers Association's publication states that many fixed assets do not appear to be appropriate for inclusion in a capital budget because of their nature and recurring characteristics. The Home Rule Act authorizes the purchase of equipment as part of a capital project for any public betterment or improvement when first acquired or erected.

Existing published criteria are not adequate to consistently distinguish capital from maintenance items. The budget for the renovation and modernization of D.C. Children's Center project provided for general obligation bond financing. The following list of items which were included in the capital budget could have been classified as maintenance items.

<u>ITEM</u>	<u>COST ESTIMATE</u>
1. Replace heat distribution system- Cedar Knoll	\$1,620,000
2. Replace heat distribution system- Forest Haven	870,000
3. Replace defective heat and air conditioning lines-Central Administration Building	138,000
4. Increases electrical service- Forest Haven Cottages	61,000
5. Install sump pumps-all locations	78,000
6. Replace air handling units-Wilson Cottages, Cedar Knoll and Holly Cottage- Forest Haven	84,000
7. Repair or replace condensate lines from laundry to power plant-Oak Hill	114,000
8. Improve street lighting-Forest Haven, Maple Glenn and Cedar Knoll	204,000

9. Administration building control area- Maple Glenn	7,800
10. Replace pump in power plant-Forest Haven	20,400
11. Rewire recessed light fixtures in nursery- Forest Haven	7,200
12. Replace underground service to entrance lights	10,200
13. Repair gymnasium floor-Cedar Knoll	24,000
14. Renovate linen storage areas-Central Infirmary and Central Laundry	12,000
15. Install catwalks in power plants-Forest Haven and Oak Hill	<u>16,800</u>
Total	<u>\$3,267,400</u>

Equipment criteria

The Home Rule Act states that equipment is eligible for bond financing if purchased for any public betterment or improvement when first erected or acquired.

The Capital Improvements Program instructions state, however, that certain types of equipment are eligible for inclusion in the capital budget, even though it is for renovations or replacement. These two types of equipment are:

- Group I Items permanently connected and designed as an integral part of the building. Example: boilers, generators, elevators, escalators, nurses call stations, pneumatic tube system, air conditioning and exhaust systems.
- Group II Items permanently connected to building services or the structure itself for which design characteristics must be coordinated with the various mechanical trades. Examples: laundry machines, sterilizers, dishwashers, walk-in refrigerators and freezers, ovens and X-ray units.

A new financial management system for the District is being designed by the Temporary Commission on Financial Oversight of the District of Columbia and is subject to approval by GAO. The financial management system will include a system for capital budgeting. The District will have to improve the criteria for including items in its capital budget in order to properly implement the new system.

Conclusions

We believe that the District's criteria for including items in the capital budget for long-term financing are not clear enough to exclude operating items. The criteria may be subjectively interpreted and should be refined so the District can avoid some of the pitfalls experienced by other cities.

Recommendations

We recommend that the City Administrator refine and clarify the criteria for determining when betterments and improvements are to be considered as capital items and thus eligible for bond financing to minimize subjective interpretations. The criteria established should be consistent with the Home Rule Act, the District's Accounting Principles and Standards and take into account the other criteria cited in this report. All items currently in the capital budget that do not meet refined and clarified criteria should be removed from the capital budget.

We also recommend that Group I and Group II equipment classifications be eliminated. The items previously classified as Group I and Group II should be required to meet the criteria for permanent improvements before they are included in the capital budget.

IMPROVEMENTS NEEDED BEFORE BOND PROGRAM IS REINSTITUTED

The District was in the process of preparing a bond program before the first bond issue was postponed. A bond counsel was retained to review the District's bond authority and outline a course of action for the program.

This section discusses some improvements that should be made before the bond program is reinstituted in 1981. Improvements concern establishing formal bond issuance procedures, and accurately projecting water and sewer revenues to establish the soundness of revenue bonds.

Formal bond issuance
procedures needed

Although preparations were made for the first bond issue, the District never adopted formal procedures to issue bonds. District officials said they planned to follow the requirements in the Home Rule Act and the course of action proposed in the bond counsel report. Accordingly, the following actions were planned by officials.

1. Advertise the bond issue by publishing a notice of sale in certain newspapers.
2. Prepare and distribute a brochure or fiscal statement setting forth the details of the proposed bond issue and a full disclosure statement covering the District's fundamental strengths and weaknesses as well as its assets, liabilities, and sources of revenue.
3. Obtain a bond rating from one or both of the major bond rating agencies.
4. Accept bids and deliver bonds to the successful bidder.
5. Provide for the repayment of bonds issued.

Conclusion

A successful bond program results from good planning, coordinating, and meeting deadlines and timetables. Written procedures would delineate responsibilities and establish the steps needed to inform and guide personnel and insure all required actions are taken when needed.

Recommendation

We recommend that the City Administrator direct OBMS to adopt formal detailed procedures before reinstituting the bond program.

Accurate water and sewer
revenue forecasts are needed

The Office of Budget and Management Systems used revenue forecasts to establish the amount of borrowing for the coming year and 6-year planning period. Accurate revenue forecasts are important to determine the level of capital investment

that can be afforded and to insure that the legal debt ceiling is not exceeded.

The Department of Finance and Revenue is responsible for estimating the District's future revenues for budgeting and planning purposes. The Department drafts projections on a current-year and multi-year basis and updates them periodically. It also calculates the effect that tax authority changes will have on City revenues.

Projections of the City's revenues from year to year have been reasonably accurate. The schedule below compares actual revenue with previous year estimates from fiscal years 1970 to 1975. The revenue amounts have been adjusted to show the revenue from which the debt ceiling is calculated.

Comparison of Estimated and Actual Revenue
for Fiscal Years 1970 to 1975

<u>Fiscal year</u>	<u>Estimated revenue</u>	<u>Actual revenue</u>	<u>Difference over (under) estimate</u>	
			<u>Amount</u>	<u>Percent</u>
	-----millions-----			
1970	\$548.475	\$540.008	(\$8.467)	(1.54)
1971	608.698	616.908	\$8.210	1.35
1972	684.907	681.237	(\$3.670)	(0.54)
1973	746.209	733.773	(\$12.436)	(1.67)
1974	777.983	779.440	\$1.457	0.19
1975	839.335	826.278	(\$13.057)	(1.56)

The accuracy of water and sewer revenue estimates, however, is a different matter. A Department of Finance and Revenue official said water and sewer revenues are difficult to estimate. This is caused primarily by the difficulty of maintaining the billing and collection cycle which causes miscalculations of revenue flows that effect the accuracy of projections.

Though these revenues represent a relatively small portion of the budget, they are significant because water and sewer services will require a good deal of capital investment in the future. According to the 1980-85

Capital Improvements Program Report, water and sewer projects will account for about 22.4 percent of the City's total capital requirements in that period. If water and sewer revenues are to finance related debt service and bond retirement costs, accurate revenue projections will be necessary to establish the soundness of revenue bonds issued for water and sewer capital improvements. Water and sewer revenue projection errors could result in insufficient funds to pay all bond costs.

The chart below compares estimated water and sewer revenues with actual revenues. The difference between revenue projections and revenue received is substantial.

Water and Sewer Revenue Estimates (note a)
1970-1975

	<u>Estimate</u>	<u>Actual</u>	<u>Difference</u> <u>over (under)</u> <u>original estimate</u>	
			<u>Amount</u>	<u>Percent</u>
	----- (000 omitted) -----			
1970	\$24,496	\$22,510	(1,986)	(8.1)
1971	24,288	25,573	1,285	5.3
1972	25,597	27,656	2,059	8.0
1973	29,389	25,753	(3,636)	(12.4)
1974	33,303	29,122	(4,181)	(12.6)
1975	35,710	30,646	(5,064)	(14.2)

a/Comparative Reports of Revenue and Other Receipts by Funds
D.C. Department of Finance and Revenue

A Department of Finance and Revenue official said that a good deal more accuracy should be achieved in projecting these revenues and that an accurate estimate should be within 2 percent of actual.

The Department of Finance and Revenue comments to GAO on the accuracy of water and sewer estimates included:

"At present it is difficult to estimate sewer and water service charge revenues for several inter-related factors. Because DFR is not closely familiar with the water and sewer billing system it is

unable to pinpoint the exact problems but can only address the problems it has encountered or surmised as it has attempted to gather information for preparing the estimates. First, the water consumption data does not appear to be reliable. Second, there seems to be uncertainty regarding accounts receivable and delinquency rates. Third, it has been difficult to anticipate the number of bills which could not be mailed because of errors or the number of bills returned or challenged because of error. * * * There are undoubtedly other problems--such as partial payments and the lack of enforcement action such as water cutoffs--which cause estimating errors.

"* * * At the present both DES and DFR are eagerly awaiting the launching of a new water and sewer service billing system being developed under the auspices of the Temporary Commission on Financial Oversight. One of the features of this system is the development of an information base, procedures and a software package for estimating revenues. It is expected that by late Fiscal Year 1979 this system will allow DES to begin to estimate accurately water and sewer revenues."

Conclusion

Revenue projections for water and sewer services have not been as accurate as they should be. These inaccuracies largely result from problems in the water and sewer services billing system. Accurate revenue projections are needed to establish the soundness of revenue bonds.

Recommendation

We recommend that the City Administrator develop procedures for preparing accurate estimates. The estimates should be reviewed and approved before they are finalized and published in financial reports.

Summary of
FY 1980 Permanent Improvements Request
and CIP-TAC Recommendations
(\$ Thousands)

<u>Agency</u>	<u>Amount Requested</u>	<u>Amount Recommended</u>
Public Schools	\$10,016.4	\$ 3,062.8
University of the District of Columbia	2,064.0	240.0
Public Library	4,262.4	1,368.0
Department of Recreation	10,620.0	1,470.0
Police Department	3,528.0	762.0
Fire Department	3,421.2	924.0
Department of Corrections	768.0	600.0
Department of General Services	2,022.0	396.0
Department of Human Resources	14,025.6	512.4
D.C. General Hospital	1,214.4	434.4
Department of Environmental Services	<u>645.6</u>	<u>354.0</u>
Total	<u>\$52,587.6</u>	<u>\$10,123.6</u>

Source: Office of Budget and Management Systems

ADMINISTRATIVE ISSUANCE SYSTEM

Mayor's Memorandum 78-56

MAY 8 1978

TO: Heads of Selected Agencies *lf*
ORIGINATOR: Comer S. Coppie, Special Assistant to the Mayor
SUBJECT: Preparation of the FY 1980-1985 Capital Improvements Program

Attached are the instructions and guidelines to be used in preparing the 1980-1985 Capital Improvements Program. This program is the major planning-programming document for development of and improvements to the capital facilities of the District of Columbia Government.

During the past six-year period, the District Government initiated in excess of 200 Capital Improvements projects with a total cost of more than \$1 billion. These projects are currently in process and will be completed during the next several years. The projects will provide the City with new and modernized facilities and will increase the capacity of the District to provide services in all program areas.

Since this major program is nearing completion, the emphasis in the 1980-1985 Capital Improvements Program will be upon the preservation and improvement of existing facilities rather than the continued expansion of program space. This will allow the District Government to evaluate the impact of new facilities that have already been funded before additional expansion is requested.

In planning capital improvements for the 1980-1985 period, agencies should analyze the possibility of making better use of existing space or of co-locating with other agencies before new or replacement facilities are requested. Unused or underused space should be identified either for use for other program requirements or for sale as surplus property. Each agency should carefully evaluate its current and proposed facilities in order to develop programs for maximum energy conservation. In no instance should projects be proposed that will result in additional operating budget program expenditures. The following changes in the procedures and information required for the Capital Improvements request should be noted:

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1. The call to agencies for permanent improvements projects was issued prior to the regular budget call in order to allow the Department of General Services adequate time to fully define and develop the total Fiscal Year 1980 permanent improvements request. Submitted projects that conform to the "Guidelines on Permanent Improvements for Fiscal Year 1980" have been referred to DGS for the preparation of valid cost estimates. Projects that did not meet those guidelines have been returned to the agencies for development as individual capital improvements projects or for inclusion in the agencies' operating budget requests. Although DGS will present the over-all FY 1980 permanent improvements package, agencies are still expected to continue to work with the Department of General Services in the development of their long range permanent improvements plans and schedules. These procedures for the development of the permanent improvements aspect of the CIP will be followed in the future.
2. Unlike prior Capital Improvements Program Instructions, which were reissued in their entirety each year, this year's manual has been developed for continued use throughout the Six-Year program period. Future CIP Instructions will consist of annual revisions and additions to this basic manual, which should be retained on permanent file for later use.
3. Agencies are now required to report all capital improvements that are programmed for District facilities during the upcoming fiscal year, including those improvements that are funded from some source other than the capital budget, such as Federal grants. A new OBMS Form 12 has been developed for this purpose and should be completed according to the guidelines contained in these instructions.

A list of individuals to contact for additional information on the preparation of the FY 1980 budget and out-year submission is attached, as is the schedule for the submission and review of the Six-Year Capital Improvements Program. As noted on the schedule, all submissions must be forwarded to the Capital Improvements Division, Room 1212, Munsey Building, NOT LATER THAN JUNE 1, 1978. The original plus eleven completed copies of the submission are to be transmitted in writing from each agency head to the Director of the Office of Budget and Management Systems.

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Any questions concerning the 1980-1985 Capital Improvements Program should be referred to Harold Walker, Acting Chief, Capital Improvements Division on Extension 629-3481.

Attachment

Attachment A

1980-1985 CAPITAL IMPROVEMENTS PROGRAM SCHEDULE

The schedule that follows summarizes the established milestone dates for preparation of the Six-Year Program. Each date specified must be met in order to release the FY 1980 Capital Budget and 1980-1985 Capital Improvements Program on a timely basis.

Date

May 3	Release Instructions to Agencies
June 1	Full Agency Submissions Due
June 5-16	CIP-TAC Review of Agency Submissions
June 26	CIP-TAC Recommendations Completed
June 28	Cash Flow Estimates to Agencies
July 14	Mayor's Recommendations Completed Cash Flow Estimates Due
July 17 - August 7	Prepare Final CIP and FY 1980 Capital Budget
August 8 - Sept. 8	Typesetting and Printing
September 11	Budget and Six-Year Program Ready for Release

Summary of the
Capital Budget Process

- Step 1: District agencies are briefed on planning and development activity going on in the city by representatives of the Municipal Planning Office, the Office of Budget and Management Systems, the Department of Housing and Community Development, the National Park Service, and the National Capital Planning Commission. The purpose of the meeting is to provide planning information and analysis of potential impacts on agency plans for capital improvements. District priorities for development are identified such as around the Civic Center, Metro Stations, Pennsylvania Avenue, Downtown, and Urban Renewal Areas.
- Step 2: District agencies are briefed on financial planning information, long range budget requirements, status of current capital improvements program, instructions for development of new program, and budget policy for current year.
- Step 3: Agencies submit projects to OBMS. Projects are then reviewed by the Capital Improvements Program-Technical Advisory Committee (CIP-TAC) composed of representatives from: Office of Budget and Management Systems, Municipal Planning Office, Department of General Services, Department of Housing and Community Development, Community Services Division; and the National Capital Planning Commission. CIP-TAC determines project feasibility and priority based on factors such as: coordination with other planning efforts in the City, program justification and scope of work, impact on operating budget, and alternatives. CIP-TAC makes recommendations for funding to the Director, Office of Budget and Management Systems.
- Step 4: After agency appeals to CIP-TAC recommendations, OBMS makes recommendations to the Mayor who decides whether the CIP-TAC and OBMS recommendations are consistent with his goals and priorities. Agencies are given the opportunity to appeal and provide additional information for consideration if the Mayor initially rejects a proposal. OBMS then prepares final budget and six-year capital improvements program based on recommendations.

- Step 5: Mayor's Executive Budget is submitted to the City Council for consideration.
- Step 6: City Council acts on Mayor's Executive Budget based on its goals and priorities.
- Step 7: City budget is submitted to OMB for review. President then submits budget to the Congress.
- Step 8: House and Senate Appropriations Subcommittees on the District of Columbia holds hearings and acts on the city's proposals.
- Step 9: Budget is signed into law by the President.
- Source: Office of Budget and Management Systems

CIP-TAC's Criteria for Evaluation
of Permanent Improvements Program

The basic criteria for evaluating and determining priorities for funding of permanent improvements in the fiscal year 1980 Capital Budget are as follows:

1. Statutory/Code Requirements - mandatory projects necessary to comply with Federal and Local statutes and codes. Examples of such projects are: Compliance with Section 504 of Rehabilitation Act of 1973, Occupational Safety and Health Administration (OSHA) compliance, etc.
2. Basic Facility Improvements - improvements necessary to keep present facilities functioning. Examples of such projects are: roofing replacements, boiler replacements, heating and air-conditioning systems replacements, etc.
3. Efficiency Improvements - improvements that increase building efficiency, perhaps with long-term cost savings. Examples of such projects are: electrical modernizations, energy improvements, security systems, etc.
4. Program Space Improvements - improvements that increase program service delivery capabilities. Examples of such projects are: modernizations of labs, office space, police and fire stations, conversions to accommodate existing programs from leased facilities, etc.
5. Program Space Expansions - improvements required to support new program initiatives or new program space to be housed in existing facilities. Examples of such projects are: library/media center conversions, science laboratory conversions, etc.

Source: Office of Budget and Management Systems